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EXAMINER


PRITCHETT, JOSHUA L

ART UNIT	PAPER NUMBER
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2872

DATE MAILED: 03/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/664,893	Applicant(s) HERMANN ET AL. 	
	Examiner Joshua L. Pritchett	Art Unit 2872	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-25 and 27-34 is/are rejected.
- 7) ☒ Claim(s) 26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is in response to Request for Continued Examination filed January 30, 2006 and Amendment filed November 28, 2005. Claims 1-14 have been cancelled and claims 15-34 have been added as requested by the applicant.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 15-19, 22, 27-30, 33 and 34 are rejected under 35 U.S.C. 102(e) as being anticipated by Spink (US 6,661,572).

Regarding claims 15-17, 28, 33 and 34, Spink discloses a microscopy system for observing an object positionable in an object plane (Fig. 1) comprising: at least one objective lens (10) arrangement for receiving an object side beam emanating from the object plane and for transforming the object side beam into an image side beam (Fig. 1); plural ocular systems (20a-b, 21a-b) arranged to enable each of the plural observers to observe the object by looking into a

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respective one of the plural ocular systems (Figs. 5-7), wherein each ocular system comprises at least one ocular tube (Figs. 5-7) having at least one ocular for generating an image of the object plane from the image side beam, wherein each of the plural ocular systems further comprises at least one image projector (16) having a display for superimposing an image displayed by the display with the beam path of the ocular system such that the image of the object plane is perceived by the observer in superposition with the image of the display (col. 7 lines 10-21), and wherein at least one optical setting of a first ocular system of the plural ocular systems is adjustable independently of a corresponding optical setting of a second ocular system of the plural optical system (col. 7 lines 33-43; 17a-b, 18a-b); a controller (30-32) for generating the image displayed by the display of the first ocular system, wherein the controller is configured to generate the displayed image from a first input image based on the at least one optical setting of the first ocular system and a second image based on the optical setting of the second ocular system (col. 9 lines 49-53). Spink further discloses the controller is configured to generate the displayed image from a second input image independently of the at least one optical setting, wherein the second input image is superimposed with the first input image. Controller (32) of Spink controls the prisms that generate the superimposed image viewed independently of the shutter controlled by controller (30). Spink further discloses the second input image is superimposed on the first input image (col. 7 lines 17-19).

Regarding claim 18, Spink discloses the first ocular system comprises a first camera (13a) and the second ocular system comprises a second camera (13b) and wherein the controller is configured to determine the at least one optical setting based on the comparison of an image detected by the first camera with an image detected by the second camera. Controller (30) of

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Spink will determine the shutter location based on the superimposition of the image (col. 9 lines 49-53).

Regarding claims 19, 29 and 30, Spink discloses the objective lens arrangement comprises an optical axis, wherein the ocular tube of the first ocular system is rotatable about the objective lens arrangement and the optical axis, wherein the at least one optical setting comprise a rotational position of the controller is configured to generate the displayed image from the first input image by rotating the first input image about an image rotation angle determined in dependence of the rotational position of the ocular tube (Figs. 5-7). Figs. 5-7 show that the ocular systems are rotatable about the objective lens. Controller (32) of Spink is also capable of rotating the displayed image (col. 9 lines 49-53).

Regarding claim 22, Spink discloses the second ocular tube is rotatable about the optical axis (Figs. 5-7); the optical setting of the second ocular system comprises a rotation position (col. 7 lines 14-16) and the controller is configured to generate the image displayed by the second ocular system by rotating the first input image by a second rotation angle (col. 7 lines 17-19)

Regarding claim 27, Spink discloses the plural ocular systems is a binocular system (Figs. 1 and 5-7).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

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such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 20, 21 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spink (US 6,661,572).

Regarding claim 20, Spink teaches the invention as claimed but lacks specific reference to the detection of the angle between the ocular tube and the objective lens arrangement. Spink teaches that the controller (32) detects the position of the prisms and rotation of the prisms used to convey the image side beam to the ocular tube. One of ordinary skill in the art would find it obvious to have the controller also detect the angle between the objective lens and the ocular tube for the purpose rotating the prisms to the proper angle to allow the observer to see the image. Official Notice is taken. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the Spink invention include the detection of the angle between the ocular tube and the objective lens as is known in the art for the purpose of allowing the observer to view the image of the object.

Regarding claims 21 and 25, Spink teaches the invention as claimed but lacks reference to comparing the images of the two cameras. Spink teaches two cameras (13a-b) and the controller (32) detecting the position of the prisms and rotation of the prisms used to convey the image side beam to the ocular tube. One of ordinary skill in the art would find it obvious to compare the images of the two cameras to determine the angle of rotation of the ocular tube to the objective lens. Official Notice is taken. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the Spink invention include the detection of the rotation angle as is known in the art for the purpose of properly rotating the

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prisms to convey the image side beam to the ocular tube thus allowing the observer to view the image of the object.

Claims 23, 24, 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spink (US 6,661,572) in view of Hoppl (US 5,002,376).

Spink teaches the invention as claimed including first and second cameras (13a-b) but lacks reference to the magnification of the plural ocular systems being independently adjustable. Hoppl teaches the magnification of two separate ocular systems are independently adjustable (abstract). Hoppl teaches a means for detecting the setting of the zoom components with respect to one another (col. 4 lines 19-60). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the Spink invention include the independently adjustable ocular magnification of Hoppl for the purpose of allowing the two observers to view two different images of the same object simultaneously.

Allowable Subject Matter

Claim 26 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art fails to teach or suggest the controller scaling the first input image with a second scale factor determined in dependence of the magnification of the image generated by the second ocular system.

Response to Arguments

Applicant's arguments filed November 28, 2005 have been fully considered but they are not persuasive.

Applicant argues that the current invention does not need the shutters taught by Spink. The use of the transitional phrase "comprising" allows that the prior art may include additional elements not listed in claimed limitations. If the applicant wishes to limit the elements to only those listed in the claimed limitations the examiner suggests the use of the transitional phrase "consisting of."

Applicant argues that Spink discloses only one display and one projector for superimposing the images. Spink teaches that images may be superimposed on other beam paths (col. 7 lines 17-19). Thus the Spink reference is not limited to a single superimposition but may superimpose images on a plurality of observation beam paths.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua L. Pritchett whose telephone number is 571-272-2318. The examiner can normally be reached on Monday - Friday 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew A. Dunn can be reached on 571-272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JLP *h*


DREW A. DUNN
SUPERVISORY PATENT EXAMINER